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1 1. (Amended once) A method of [treating]
2 smoothing wrinkles in a region of wrinkled skin
3 comprising the steps of:
4 applying pulsed light to a surface of the region
5 of wrinkled skin[,];
6 heating collagen [and shrinking the collagen,
7 thereby reviving the elasticity of the collagen and
8 of the skin] in the region of wrinkled skin to a
9 temperature that will shrink the collagen
10 sufficiently to reduce the wrinkles.

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1 3. (Amended once) [The method of claim 2] A
2 method of smoothing wrinkles in a region of wrinkled
3 skin comprising the steps of:
4 applying pulsed light to a surface of the region
5 of wrinkled skin;
6 protecting the epidermis and outer layers of the
7 skin by cooling the epidermis of the skin;
8 heating collagen in the region of wrinkled skin
9 to a temperature that will shrink the collagen
10 sufficiently to reduce the wrinkles, wherein the step
11 of cooling includes the step of applying a
12 transparent substance having a temperature less than
13 an ambient temperature[,] to the region of skin.

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1 7. (Amended once) [The method of claim 2] A
2 method of smoothing wrinkles in a region of wrinkled
3 skin comprising the steps of:
4 applying pulsed light to a surface of the region
5 of wrinkled skin;
6 protecting the epidermis and outer layers of the
7 skin by cooling the epidermis of the skin;
8 heating collagen in the region of wrinkled skin
9 to a temperature that will shrink the collagen
10 sufficiently to reduce the wrinkles, wherein the step
11 of cooling includes the step of applying a
12 transparent substance to the region of skin and
13 reducing the temperature of the substance.

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1 12. (Amended once) The method of claim 11
2 wherein the step of pulsing a laser includes the step of
3 pulsing a [Nd(Yag)] Nd:YAG laser.

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1 21. (Amended once) [The method of claim 20] A
2 method of generating a temperature distribution
3 inside a region of skin having a maximum temperature
4 at a selected depth comprising the steps of:
5 cooling the epidermis of the region of wrinkled
6 skin to provide a first depth-wise temperature
7 profile; and

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8 applying pulsed light to the region of skin
9 sufficient to change the first depth-wise temperature
10 profile to a second depth-wise temperature profile
11 having a temperature maxima at the selected depth
12 below the surface of the skin, wherein the step of
13 cooling includes the step of applying a transparent
14 substance having a temperature less than an ambient
15 temperature[,] to the region of skin.

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1 23. (Amended once) [The method of claim 20] A
2 method of generating a temperature distribution
3 inside a region of skin having a maximum temperature
4 at a selected depth comprising the steps of:
5 cooling the epidermis of the region of wrinkled
6 skin to provide a first depth-wise temperature
7 profile; and
8 applying pulsed light to the region of skin
9 sufficient to change the first depth-wise temperature
10 profile to a second depth-wise temperature profile
11 having a temperature maxima at the selected depth
12 below the surface of the skin, wherein the step of
13 cooling includes the step of applying a transparent
14 substance to the region of skin and reducing the
15 temperature of the substance.

1 24. (Amended once) [The method of claim 20] A
2 method of generating a temperature distribution
3 inside a region of skin having a maximum temperature
4 at a selected depth comprising the steps of:
5 cooling the epidermis of the region of wrinkled
6 skin to provide a first depth-wise temperature
7 profile; and
8 applying pulsed light to the region of skin
9 sufficient to change the first depth-wise temperature
10 profile to a second depth-wise temperature profile
11 having a temperature maxima at the selected depth
12 below the surface of the skin, further including the
13 steps of controlling a pulse duration and applying
14 multiple pulses.

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1 25. (Amended once) An apparatus for treating a
2 region of skin comprising:
3 a pulsed light source [capable of] for heating
4 and shrinking collagen [and shrinking the collagen,
5 thereby reviving the elasticity of the collagen and
6 of the skin,] in the region of skin to a degree
7 sufficient to reduce wrinkles in the region of skin;
8 and
9 a housing, in which the pulsed light source is
10 disposed, wherein the housing includes an aperture
11 [suitable for directing the] disposed with respect to

12 ~~the pulsed light source to direct light emitted from~~
13 ~~the light source to the region of skin.~~

1 26. (Amended once) The apparatus of claim 25
2 further including a timer, connected to the pulsed light
3 source, for indicating when a delay time has [passes]
4 passed after an application of a cooling substance to the
5 skin region.

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2 ~~25~~ 27. (Amended once) The apparatus of claim [25]
3 ~~26~~ wherein the pulsed light source includes a
4 microprocessor for determining the delay time in response
5 to a selected skin temperature profile.

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2 ~~25~~ 28. (Amended once) The apparatus of claim [25]
3 ~~26~~ wherein the pulsed light source includes a
4 microprocessor for determining the delay time in response
5 to a selected collagen heating depth.

1 ~~sub 4~~ 29. (Amended once) The apparatus of claim 26
2 including means for reducing the temperature of the
3 cooling substance, wherein [the cooling] means for
4 reducing is disposed to provide a signal indicative of
5 cooling to the timer.

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1 32. (Amended once) The apparatus of claim 31
2 wherein the laser is a [Nd(Yag)] Nd:YAG laser.

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1 38. (Amended once) A method of cutaneous
2 resurfacing of a region of skin by removing at least
3 an outer layer of skin in the region comprising the
4 steps of:
5 producing Er:YAG laser light[,]; and
6 directing the light to the region of skin for a
7 duration and with an intensity sufficient to remove
8 an outer layer of skin;
9 waiting for a period of time not less than the
10 thermal relaxation time of the skin; and
11 repeating the step of directing the light.

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2 43. (Amended once) An apparatus [of cutaneous
3 resurfacing of] for skin rejuvenation by removing at
4 least an outer layer of skin in a region of skin
5 comprising:
6 an Er:YAG laser light source disposed in a
7 housing capable of directing light to the region of
8 skin for a duration and with an intensity sufficient
9 to remove the outer layer;
10 a pulse forming circuit coupled to the Er:YAG
11 laser light source including a pulse delay circuit
for providing a delay between sequential pulses of

a9 12 Er:YAG light for a period of time not less than the
13 thermal relaxation time of the skin.

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2 ¹² 45. (Amended once) The apparatus of claim [44]
3 ~~43~~, wherein the [pulse forming circuit includes a] pulse
4 delay circuit [for producing] produces a delay in the
range of 0.5-10msec between pulses.

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2 47. (Amended once) An apparatus for the
3 cutaneous resurfacing of a region of skin, including
4 skin resurfacing [or] and wrinkle smoothing, which
5 comprises:
6 an incoherent light source such as a flashlamp
7 for generating incoherent light for heating collagen
8 to a temperature sufficient to reduce wrinkling;
9 an Er:YAG laser which can be operated in
10 multiple pulse mode for generating laser light; and
11 a delivery system disposed to deliver the
incoherent light and laser light to the region.

REMARKS

Reexamination and reconsideration of the above-identified application are respectfully requested in accordance with 37 C.F.R. 1.111 in light of the foregoing amendments to the specification and claims under 37 C.F.R. 1.115.